Reference Manual

Solaira Alpha H1 (Single Emitter)

CANADA & USA MODELS:

SALPHA15120	(120V - 1500W)
SALPHA10240	(208 / 240V - 750 / 1000W)
SALPHA15240	(208 / 240V - 1125 / 1500W)
SALPHA20240	(208 / 240V - 1500 / 2000W)



WEATHERPROOF INFRARED HEATERS SUITABLE FOR OUTDOOR AND INDOOR USE -RESIDENTIAL, COMMERCIAL AND INDUSTRIAL



INFORESIGHT CONSUMER PRODUCTS INC.

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When using electrical INFRARED HEATERS, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read all instructions before using this heater.

- 2. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- 3. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 6 feet (1.8m) from the front of the heater and keep them away from the sides and rear.
- 4. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 5. Always unplug the 120 volt heater when not in use.
- 6. Do not operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
- 7. This heater is not intended for use in bathrooms, laundry areas and similar locations. Never locate heater where it may fall into a bathtub or other water container.
- 8. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or the like. Arrange cord away from traffic area and where it will not be tripped over.
- 9. To disconnect heater, (if hard wired) turn controls to off or remove the 3-pin 120 volt plug from outlet.

IMPORTANT INSTRUCTIONS

- 10. Connect to properly grounded outlets only.
- 11. Do not insert or allow foreign objects to enter any opening as this may cause an electric shock or fire, or damage the heater.
- 12. To prevent a possible fire, do not block openings in any manner.
- 13. A heater has hot parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- 14. Avoid the use of an extension cord because the extension cord may overheat and cause a risk of fire.
- 15. Do not cover or otherwise obstruct the heater.
- 16. Do not touch the heater during operation as the body becomes very hot and cause burns. Particular attention has been given where children and vulnerable people are present.

SAVE THESE INSTRUCTIONS

GROUNDING INSTRUCTIONS

For the 120 volt heater. The cord has 3-pin grounded plug.

For the 208 / 240 volt heater. The cord from the terminal box must be hard wired.



WARNING: RISK OF FIRE

Keep combustible material such as furniture, papers, clothes and curtains at least 6 feet (1.8m) from the front of the heater and away from the sides and rear.





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INTRODUCTION

The Alpha H1 heater produces radiant heat like the sun, warming people and objects rather than the air in between. It is mounted on an adjustable bracket that allows the heat to be directed exactly where it is required. The Alpha H1 can also be used in a modular system in that more than one heater can be joined together - see 'Configurations' later in the manual. The Alpha H1 weatherproof heater is designed for indoor and outdoor use.

Please read the following instructions carefully before use. The safety of this heater is guaranteed only by its correct usage in accordance with these instructions, therefore they should be retained for future reference.

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CAUTION

Before using this appliance:

- 1. Check that the voltage indicated on the units rating label corresponds to the mains supply voltage.
- 2. Do not install the heaters less than the minimum height from the floor as specified below in the specification Table. 1.
- 3. Ensure that the heater has been securely fastened in its final mounting position.
- 4. **WARNING** This appliance must be grounded!
- 5. **WARNING** Keep the mains cord away from the body of the heater which will get hot during use.
- 6. If a socket outlet is used do not position the outlet immediately behind the heater.
- 7. Avoid the use of an extension cord with this product.
- 8. Do not cover or obstruct the heater while it is in use.
- 9. Do not insert any object through any slot or opening in the heater.
- 10. Do not use if guard is not present.
- 11. **WARNING** When replacing the emitter or cleaning the unit, ensure that the 3-pin 120 volt plug is removed from its socket outlet or if hard wired circuit is disconnected from the mains supply. **Note**: always ensure that the emitter is cool before handling.
- 12. Do not handle the halogen emitter with bare hands. If it is inadvertently touched, remove finger marks with a soft cloth and methylated spirit or rubbing alcohol. Otherwise, the marks will burn into the quartz emitter during use causing premature heater failure.
- 13. The heater is not intended for use by young children and must be supervised by a responsible person at all times.
- 14. Always remove the 3-pin 120 volt plug on the 120 volt heater if it is not being used.

SPECIFICATION

Table 1. Canada and USA Heaters

No. of Units ×	1 ×	1 ×	1 ×	1 ×	2 ×	2 ×	2 ×	3 ×	3 ×	3 ×	
Model Type	SALPHA	SALPHA	SALPHA	SALPHA	SALPHA	SALPHA	SALPHA	SALPHA	SALPHA	SALPHA	
	15240	10240	15240	20240	10240	15240	20240	10240	15240	20240	
Voltage (Volts)	120	208 / 240									
No. of Emitters ×	1 ×	1 ×	1 ×	1 ×	2 ×	2 ×	2 ×	3 ×	3 ×	3 ×	
Power (Watts)	1500	750 / 1000	1125 / 1500	1500 / 2000	750 / 1000	1125 / 1500	1500 / 2000	750 / 1000	1125 / 1500	1500 / 2000	
Total Power of Unit (Watts)	1500	750 / 1000	1125 / 1500	1500 / 2000	1500 / 2000	2250 / 3000	3000 / 4000	2250 / 3000	3375 / 4500	4500 / 6000	
Current (Amps) per Emitter	12.5	3.6 / 4.2	5.4 / 6.3	7.2/8.3	3.6 / 4.2	5.4 / 6.3	7.2 / 8.3	3.6 / 4.2	5.4 / 6.3	7.2 / 8.3	
Total Current (Amps) of Unit	12.5	3.6 / 4.2	5.4 / 6.3	7.2/8.3	7.2 / 8.3	10.8 / 12.5	14.4 / 16.7	10.8 / 12.5	16.2 / 18.8	21.6 / 25.0	
Min. Mounting		79 in				98¼ in			98¼ in / 108 in	108 in / 120 in	
Height From		(201 cm)				(250 cm) (250 cm / 2			(250 cm / 274	(250 cm / 305	
Floor			, , , , , , , , , , , , , , , , , , ,				, , , , , , , , , , , , , , , , , , ,		cm)	cm)	
Min. Distance		11¾ in				19½ in					
From Ceiling A		(30 cm)				(50 cm)					
Min. Distance		39½ in								59 in	
From Side Wall		(100 cm)							(150 cm)		
Dimensions -		17 in × 9 in × 12¼ in				17 in × 18¼ in × 16 in			17 in × 27¼ in × 17¼ in		
W × H × D (inc.		(43 cm × 23 cm × 32 cm) (43				cm × 46 cm × 41 cm)		(43	(43 cm × 69 cm × 44 cm)		
bracket & bars max pos.)		,		,	, , , , , , , , , , , , , , , , , , ,		,				
Weight		7.5 lb				15 lb			22.5 lb		
-		(3.4 kg)			(6.8 kg)				(10.2 kg)		

WARNING - RISK OF FIRE: Heaters rated at 208 / 240 Volt, 2 Kilowatt and above are <u>not intended</u> for use as indoor residential or as a household heater but maybe used for commercial/industrial use.

CONFIGURATIONS

The Alpha H1 heater is a single emitter unit - it has one only. It can be installed on its own or joined to one or two more of the same units. It is supplied with joining bars that connect the heaters together to increase the size and output of the installation. The maximum number of single units that can be joined together is three. Please read the section 'assembling' for information on how this should be done.

INSTALLATION

The 120V Alpha H1 heater is fitted with 15 feet (500 cm) of supply cable and a molded 3 - pin 15 amp plug.

The 208 / 240V version of the heater is fitted with 2 x supply cords measuring 79 inches (200 cm) for hard wiring.

- ▲ WARNING: Wiring procedures and connections should be in accordance with the National Electric Code (NEC) and local codes.
- ▲ WARNING: If the supply cord becomes damaged, it must be immediately replaced by a qualified person in order to avoid a hazard.
- **A** CAUTION: Disconnect electric power supply before working on circuit wiring to prevent electric shock.
- **A** CAUTION: Please observe the minimum safe distance between the heater body and any inflammable surfaces.
- **A** CAUTION: When the electrical connection is outside weatherproof sockets must be used having ground fault protection (GFCI or GFI).
 - **I** NOTE: CONSULT A QUALIFIED ELECTRICIAN, IF IN DOUBT.

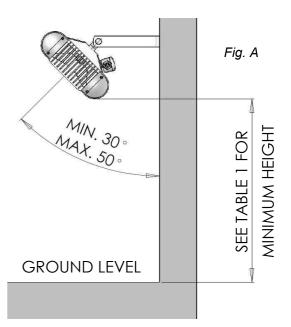
MOUNTING -SINGLE UNIT (WALL MOUNTED OR CHAIN HANGING)

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CAUTION

Switch off/unplug the heater from the mains supply when mounting or adjusting the heater position.

- The Alpha H1 heater should only be wall mounted in a horizontal manner or hung from a ceiling from chains (not supplied).
- When wall mounting the Alpha H1 heater in a horizontal manner, do not position the heater at an angle more than 50° and less than 30° as shown in Fig. A.



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- When ceiling hanging the Alpha H1 heater, ensure the minimum distance from the ceiling is adhered to as shown in Fig. B.
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!
- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to Table 1 for the recommended positioning of the heater with regards to minimum distances. <u>Do not install</u> <u>the heater in a corner!</u>
- Keep out of the reach of children.

1. When wall mounting, securely fasten the L-shaped wall brackets to the mounting surface using both of the fixing holes in the short part of the bracket (see Fig. D on the next page for mounting hole centres). Please refer to Table 1 for recommended positioning of the heater. Please note. wall fixings are not supplied. They should be selected to substantially support the weight of the installation. If in doubt contact a professional for advice! When hanging from a ceiling two equal length and gauge chains are required and should be selected with fixings that are adequate to hold the weight of the heater. Again, if in doubt contact a professional for advice!

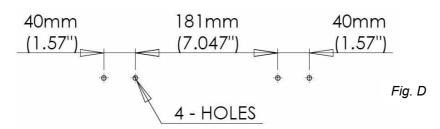
2. The heater should be mounted with the terminal box at the bottom of the heater when being wall mounted.

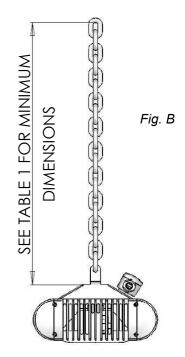
3. When wall mounting, fix in the required angular position by tightening the fixing bolts on the brackets at the rear of the heater as shown in Fig. C on the next page. The heater should face directly down when hanging.

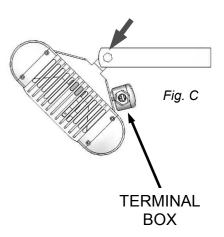
4. Secure the supply cable so it is not resting on the body or obstructing the air-vents.

Always isolate the heater from the mains supply when adjusting the position.

DRILLING HOLE TEMPLATE DIMENSIONS FOR WALL MOUNTED BRACKETS







ASSEMBLING - TWO SINGLE HEATERS JOINED (WALL MOUNTED OR CHAIN HANGING)

- 1. Take the first heater and place it face down on a flat surface.
- 2. Take the second heater and place it face down and positioned parallel to the first heater.
- 3. Push the bolts used to hold the wall brackets through the hole in the brackets on the rear heaters and slide a shake-proof washer on all the threads from the protruding side.
- 4. Slide the joining bars on each bolt and fit a washer and nut do not fully tighten at this point.
- 5. Ensure the second heater is still parallel to the first and sitting flat.
- 6. Slide the joining bars on each protruding bolt of the other heater to connect them together and fit the washers and nuts.
- 7. Again, ensuring the heaters remain flat, fully tighten all four nuts to secure the joining bars in place.

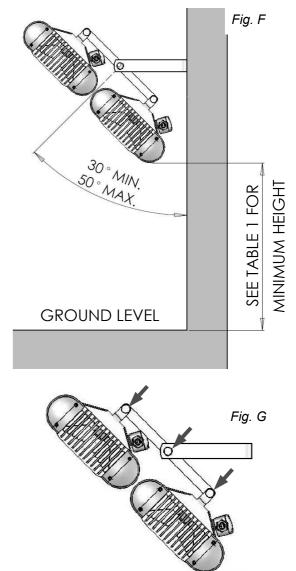
WALL MOUNTING - TWO SINGLE HEATERS JOINED

CAUTION

Switch off/unplug the heater from the mains supply when mounting or adjusting the heater position.

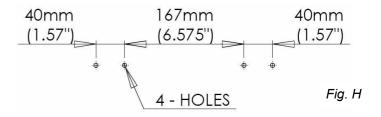
- When wall mounting two Alpha H1 heaters joined together in a horizontal manner, do not position the heater at an angle more than 50° and less than 30° as shown in Fig. F.
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!
- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to Table 1 for the recommended positioning of the heater with regards to minimum distances. <u>Do not install the heater in a corner!</u>
- Keep out of the reach of children.

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- Securely fasten the L-shaped wall brackets to the mounting surface using both of the fixing holes in the short part of the bracket (see Fig. H for mounting hole template centres). Please refer to Table 1 for recommended positioning of the heater. Please note. wall fixings are not supplied. They should be selected to substantially support the weight of the installation. If in doubt contact a professional for advice!
- 2. Fix the heater assembly to the brackets via the hole in the centre of the joining bar. The joining bars should slide inside the gap of the two wall brackets.
- 3. Place a bolt and washer in the hole of the wall bracket and put a serrated washer on the opposite side between the bracket and joining bar. Repeat on opposite side.

DRILLING HOLE TEMPLATE DIMENSIONS FOR WALL MOUNTED BRACKETS



- 4. Fit the heater assembly to the brackets and place a washer and nut on the bolts protruding through the joining bars.
- 5. Fully tighten the nut and bolts (Fig. G) with the heaters set as shown in Fig. F.
- 6. Secure the supply cables so they do not rest on the body or obstruct air-vents.

Always isolate the heater from the mains supply when adjusting the angular position.

CHAIN HANGING - TWO SINGLE HEATERS JOINED

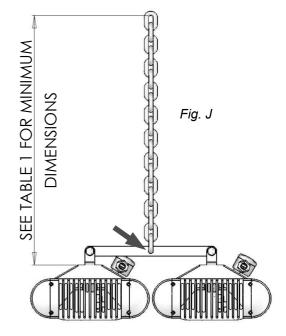


CAUTION

Switch off/unplug the heater from the mains supply when mounting or adjusting the heater position.

- When two Alpha H1 heaters are joined they can also be chain hung from a ceiling (Fig. J).
- Please refer to Table 1 for the recommended positioning of the heater with regards to minimum distances. <u>Do not install the heater in a corner!</u>
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!

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- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Keep out of the reach of children.
- 1. Please refer to Table 1 for recommended positioning of the heater. When hanging from a ceiling two chains of equal length and gauge are required and should be selected with fixings that are adequate to hold the weight of the heater. If in doubt contact a professional for advice!
- 2. Attach the heater assembly to the chains via the hole in the centre of the joining bar as shown in Fig. J. and ensure the heater faces directly down when hanging.
- 3. Secure the supply cable so they do not rest on the body or obstruct the air-vents.

Always isolate the heater from the mains supply when adjusting the position.

ASSEMBLING - THREE SINGLE HEATERS JOINED

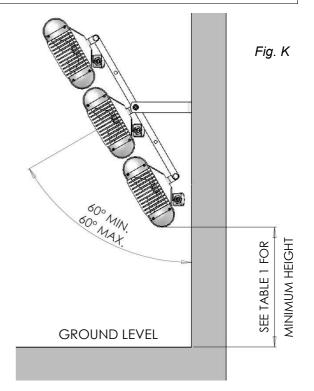
- 1. Take the first heater and lie it face down on a flat surface.
- 2. Take the second and third heaters and position them face down and parallel to the first.
- 3. Push the bolts used to hold the wall brackets through the hole in the brackets on the rear heaters and slide a shake-proof washer on all the threads from the protruding side.
- 4. Slide the joining bars on each bolt and fit a washer and nut do not fully tighten at this point.
- 5. Position the second heater so it's parallel to the first and sitting flat.
- 6. Take the third heater and a joining bar. Push a bolt and washer through the end hole and place a serrated washer on the other side. Push the bolt through the bracket hole on heater. Repeat on opposite side and secure with a washer and nut do not fully tighten at this point.
- 7. Position the third heater so it's parallel to the second.
- 8. Line-up the bars of the first heater with the brackets of the second heater they should go on the inside faces like heater one.
- 9. Line-up the bars of the third heater with the brackets of the second heater these should go on the outside faces like heater three.
- 10. Push a bolt from the back of the joining bars through the holes putting a serrated washer on each side of the heater bracket.
- 11. Fit a washer and nut to both sides and providing the assembly is sitting flat, fully tighten both sides and also the nuts of the first and third heaters to the joining bars.
- 12. The heater is now ready for mounting or hanging.

WALL MOUNTING - THREE SINGLE HEATERS JOINED

CAUTION

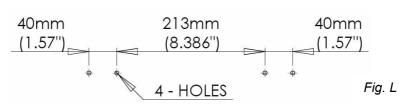
Switch off/unplug the heater from the mains supply when mounting or adjusting the heater position.

- When wall mounting three Alpha H1 heaters joined together in a vertically stacked manner, position the assembly downward as shown in Fig. K.
- Always allow the heaters to cool before attempting to reposition/move. Never attempt to move the heaters while they are switched on!
- Observe the minimum safe distance between the heater body and objects when mounting.
- Please refer to Table 1 for the recommended positioning of the heater with regards to minimum distances. <u>Do not install the heater in</u> <u>a corner!</u>



- Keep out of the reach of children.
- Securely fasten the L-shaped wall brackets to the mounting surface using both of the fixing holes in the short part of the bracket (see Fig. L for mounting hole centres). Please refer to Table 1 for recommended positioning of the heater. Please note. wall fixings are not supplied. They should be selected to substantially support the weight of the heater assembly. If in doubt contact a professional for advice!
- 2. The heater assembly should be mounted with the terminal boxes positioned at the bottom of the heaters.
- 3. Fix the heater assembly to the brackets via the bolt threads on the middle heater. A serrated washer should be placed on the threads first and the wall brackets should prise apart in order to fit the threads in place.
- 4. Place a washer and a nut on the thread on the outside of the wall brackets both sides.
- 5. Securely tighten the nut and bolts with heaters in line with each other (as assembled on flat surface).
- 6. Secure the supply cables so they do not rest on the body or obstruct air-vents.

DRILLING HOLE TEMPLATE DIMENSIONS FOR WALL MOUNTED BRACKETS

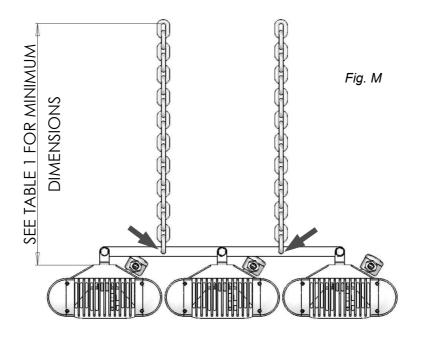


CHAIN HANGING -THREE SINGLE HEATERS JOINED



Switch off/unplug the heater from the mains supply when mounting or adjusting the heater position.

- 1. Please refer to Table 1 for recommended positioning of the heater. When hanging four chains of equal length and gauge are required and should be selected with fixings that are adequate to hold the weight of the heater assembly. If in doubt contact a professional for advice!
- 2. Attach the heater assembly to the chains via the hole in the centre of the joining bars as shown in Fig. M. and ensure the heater assembly faces directly down when hanging.
- 3. Secure the supply cables so they do not rest on the body or obstruct the air-vents.



- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to Table 1 for the recommended positioning of the heater with regards to minimum distances. Do not install the heater in a corner!
- Keep out of the reach of children.

Always isolate the heater from the mains supply when adjusting the position.

MAINTENANCE

- NOTE: For replacement emitters or spare parts please contact your local distributor quoting model type and rating from rating label. It is very important that your replacement emitter is exactly the same as the one it was supplied with. Failure to fit the exact same type can cause the heater to prematurely fail.
- **A** CAUTION: Unplug/Switch off unit from the mains supply before replacing emitter or any maintenance procedure including cleaning.
- ▲ CAUTION: Should dust or dirt appear on the reflector, it is recommended that that the guard and emitter are removed and the reflector is wiped with a lint-free cloth before reassembling (see emitter replacement instructions).

REPLACING AN EMITTER

CAUTION

Unplug/switch off from the mains to the heater or heater assembly power before any attempts are made to replace the emitter. Contact your distributor for the correct replacement emitter quoting model type and rating from rating label. It is important that you read through the emitter replacement procedure before commencing.

1. Ensure the heater and emitter are cool and the power supply is disconnected or remove the plugs from the socket outlet - all plugs must be removed even if only one emitter is to be replaced.

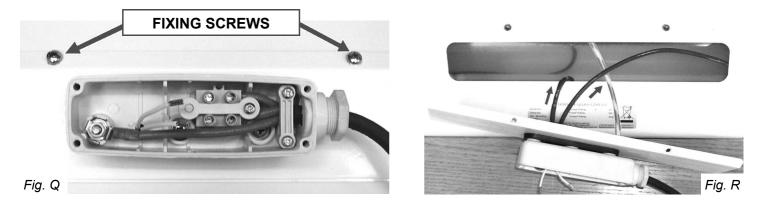
2. Remove the screws from the terminal box at the back of the emitter to be replaced and lift off the lid - see Fig. N.



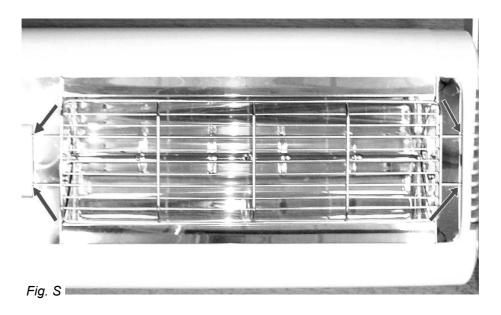
3. Disconnect the emitter from the connector block by unscrewing the screws highlighted above in Fig. P and remove the white coloured emitter wires from the connector block.

4. At the back of the heater, remove the plate holding the terminal box by removing the two fixing screws as shown in Fig. Q (over page).

5. Pull the emitter wires one at a time through the plate to remove as shown in Fig. R.

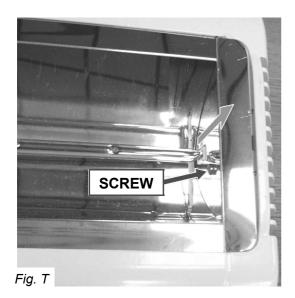


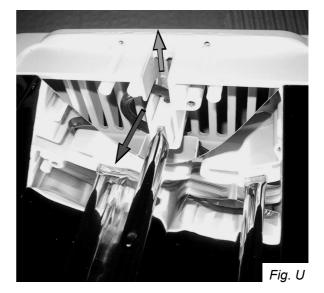
6. At the front of the heater, gently remove the wire guard by prizing it away from its locating holes at each end of the heater case (Fig. S).



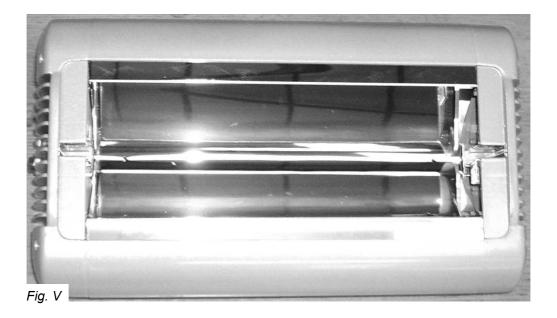
7. Remove the screw from the side reflector (Fig. T) and lift the side reflector up and away from the heater. Repeat at the opposite end to remove other side reflector.

8. The emitter wires should be pulled out of the side slots (Fig. U) and the emitter can be lifted up completely. The wires can then be gently pulled forward so that they come out from behind the reflector.



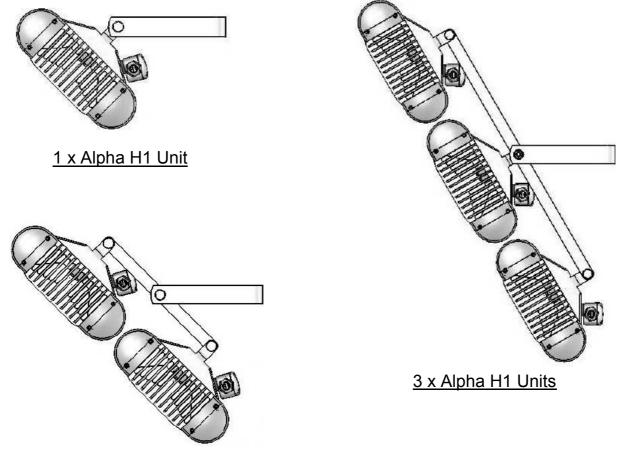


9. The emitter can now be removed away from the heater leaving it ready to have the new emitter fitted as shown in Fig. V.



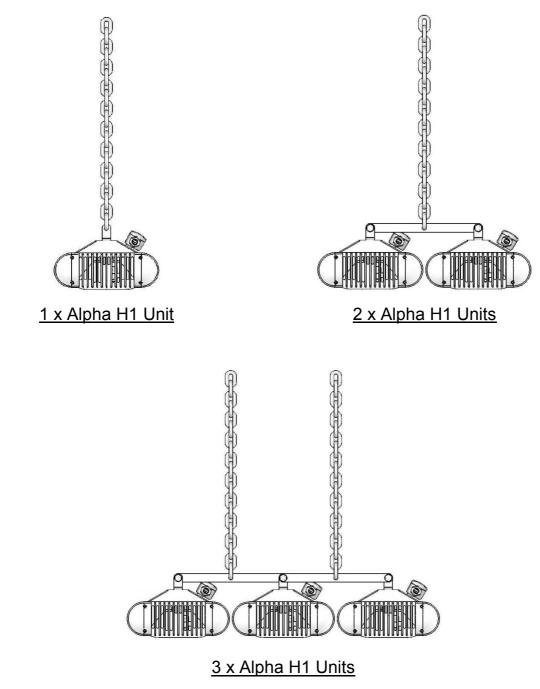
10. Refit the new emitter in reverse order making sure that no wires can get trapped. Replace both ends side reflectors and their screws. Before any other parts are fitted to make sure emitter is held safely.

WALL MOUNTED CONFIGURATIONS - AT A GLANCE



2 x Alpha H1 Units

CHAIN HANGING CONFIGURATIONS - AT A GLANCE



IMPORTANT - SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

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